

REMARKS

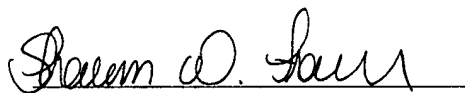
Claims 1-13 have been allowed. No claims have been amended, cancelled, or added.

The above amendments to the specification are being made to improve the specification by correcting minor typographical errors. No new matter has been introduced.

Favorable consideration and entry of the above amendments are respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants  
Shawn W. Fraser  
Registration No. 45,886

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

SWF:eyw

DC-MAIN 1391834 v1

IN THE SPECIFICATION:

Please amend the paragraph beginning at page 5, line 15 and ending at line 27, as follows.

--An example of a vibration wave actuator will be briefly described below prior to a description of an embodiment. Fig. 9 is a perspective view showing an example of a ring-like vibration wave motor serving as a vibration wave actuator. A ring-like elastic member 31 is made of an elastic material. A piezoelectric element 32 serves as an electro-mechanical energy conversion element bonded to one surface of the elastic member 31. The elastic member 31 and piezoelectric element 32 comprises a vibration member. A rotor 33 serves as a contact member pressed against the elastic member 31 by a pressurizing means (not shown). A rotating shaft 34 is integrated ~~integral~~ with the rotor 33.--

Please amend the paragraph beginning at page 10, line 26 and ending at page 11, line 1, as follows.

--The CPU 12 detects the pulse widths PW1 and PW2 (S3) after the output timing of the output signal SP2 from the comparator 7 has ~~is~~ elapsed (S2).--

Please amend the paragraph beginning at page 11, line 27 and ending at page 12, line 6, as follows.

--In the case shown in Fig. 5, comparison values C0 to C6 are set for comparators. The comparison values for the comparators may or may not be set in equal

steps. Fig. 5 shows a substantially a sine waveform and a pulse waveform obtained as a result of a comparison between the sine waveform and the comparison values C0 to C6.--

Please amend the paragraph beginning at page 14, line 26 and ending at page 15, line 3, as follows.

--It is known that an output pulse from the XOR 14 exhibits a high level for a period of time corresponding to the phase difference between two input signals having the same frequency. This phenomenon is also applied to a phase lock circuit and the like.--

Please amend the paragraph beginning at page 29, line 16 and ending at line 20, as follows.

--In this case, the inductor elements L1 and L2 are used to raise a voltage and reduce an inrush current. A voltage AOUT applied to the A-phase PZT 1 may become higher than a power supply voltage VP of each half bridge.--

Please amend the paragraph beginning at page 33, line 11 and ending at line 23, as follows.

--When the phase difference between the signals AP and SP exceeds a predetermined value, driving frequency control is stopped for the following reason. If the frequency of an AC voltage applied to the vibration wave actuator decreases below the resonance frequency of the vibration wave actuator, the rotation is stopped. If the rotational speed becomes slow due to a load variation or the like, control is performed to

decrease the driving frequency. If a phase difference set when the driving frequency is higher than the resonance frequency is set as a phase difference for control in advance, the driving frequency can be prevented from becoming lower than the resonance frequency by increasing the frequency by  $\Delta F$  when the detected phase difference exceeds the phase difference for control.--